

EXHIBIT 5

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Letters to the Editor

Probable Relationship Between Opioid Abuse and Heroin Use

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TO THE EDITOR: The abuse of OxyContin has received considerable attention in the past few years. Other prescription opioid analgesics are also widely abused. The Ohio Substance Abuse Monitoring (OSAM) Network,¹ a statewide epidemiologic surveillance system, has identified a significant increase in opioid abuse in Ohio. Data from the national level have indicated the same trend.² We documented a connection between prescription opioid abuse, subsequent heroin use, and the adoption of high-risk behaviors.

The OSAM Network is supported by the Ohio Department of Alcohol and Drug Addiction Services and operated by Wright State University School of Medicine.¹ The purpose of the OSAM Network is to gather timely epidemiologic data on substance abuse trends throughout Ohio for public health officials and policy-makers. Regional epidemiologists use data from individual and focus group interviews with drug users, treatment providers, and law enforcement officials, as well as statistical data from county coroners, local law enforcement agencies, and regional crime laboratories to develop biannual epidemiologic reports.

Between June 2001 and January 2002, the OSAM Network conducted an investigation of recently initiated heroin users. In Dayton, 10 subjects, aged 18 to 33 years, were interviewed. Five subjects reported abusing prescription opioids, most notably OxyContin, before initiating heroin use. They reported tolerance to the drug's effects and physical withdrawal symptoms when deprived of OxyContin. They reported that heroin was more readily available and less expensive than OxyContin and that they would never have tried heroin had they not become addicted to OxyContin. This trend has been identified throughout Ohio, and similar patterns have been identified in other areas of the United States.³⁻⁶

These findings are limited by the small convenience sample. However, we continually identify persons who report a similar progression from prescription opioid abuse to heroin injection. Death statistics from several county coroners' offices corroborate this increase in opioid abuse. A county in rural southeast Ohio reported seven or eight opioid-related overdose deaths in 2001, most involving heroin. Montgomery County (Dayton) reported a 36 percent increase between 2000 and 2001 in drug-related deaths involving opioids, most involving heroin and/or prescription opioid analgesics.

The results of this investigation suggest that the abuse of opioid analgesics constitutes a new route to heroin abuse, placing new populations at risk for heroin addiction. This is a reversal of the classic pattern in which heroin users would turn to prescription opioids when heroin was unavailable. In addition, although many new heroin users may begin by snorting the drug, most progress to injection drug use as their tolerance develops and the quality of heroin varies. The implications for the spread of blood-borne pathogens, such as human immunodeficiency virus, hepatitis B virus, and hepatitis C virus, are clear.

Drug abuse prevention programming aimed at young people needs to address the dangers of prescription opioid abuse as well as heroin use. In addition, physician education is needed to raise awareness of the differences between patients seeking drugs for their euphoric effects and those seeking pain relief.

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REFERENCES [show all references](#)

1. Siegal HA, Carlson RG, Kenne DR, Starr S, Stephens RC. The Ohio Substance Abuse Monitoring Network: constructing and operating a statewide epidemiologic intelligence system. *Am J Public Health.* 2000;90:1835-7....

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